



# BOLT PRO

## Uncompressed Long-Range Wireless HD Video

The Bolt Pro is a zero delay wireless video transmission system designed for the most demanding cinema, broadcast, and UAV applications. At less than 1ms latency, Bolt Pro can transmit 1080p60 4:2:2 video at up to 2000ft line of sight over the unlicensed 5GHz band.



Bolt Pro 600/2000

## FRONT PANEL OPERATION

**Status Screens** - Cycle through status screens or return from the menu by pressing the red 'Status Joystick'. (Q)

- **Main Status Screen** - This screen displays the status of the wireless receiver, along with the current video resolution, frequency, and link quality (if connected).
- **Time Code Screen** - Displays the current time code if received from the transmitter.
- **Temperature Status Screen** - Displays the current internal temperature of the unit.

**Menu Operation** - launch the menu and navigate through it with the black 'Menu Joystick' (R).

- **HDMI/SDI Out Format** - Select the video output format. You can choose to match the video source resolution by selecting 'Same as Input,' or choose from the resolutions listed.
- **Test Pattern** - Select a video output format from this menu to output a test pattern over HDMI and SDI. Return to the previous video by pressing left on the 'Menu' Joystick.
- **Pairing** - Select Pairing to link your receiver with another transmitter. Once pairing is activated on the receiver, turn on the transmitter and use a paper clip to hold the reset button (between the DC input and power switch) for 3 seconds and release. The red warning LED and link LEDs will blink to indicate that pairing is active.
- **Video Loss Settings** - Choose what is displayed when no video is received from the transmitter. The default selection ("Show OSD") will display messages about the state of the receiver. These can be disabled by selecting "Show Black Screen."
- **Display Settings** - Use these options to control the OLED display operation. You can set the display to invert every 30 minutes (lengthens the display life), or it can dim or turn off after 10 seconds or 10 minutes.
- **Reset All Settings** - Use this to reset all configurable options to their factory defaults.
- **Device Info** - Displays the model and serial number.



Bolt Pro 600/2000 TX

Bolt Pro 600/2000 RX

## CONNECT AND POWER YOUR DEVICE

- 1 Connect the output from your video source to the SDI/HDMI input (G) on the Bolt transmitter. Connect either the SDI or HDMI output from the Bolt receiver to the video input on your monitor.
- 2 Connect power to your Bolt transmitter using the included P-Tap to Lemo cable. Power the Bolt receiver with the included A/C adapter or battery plate accessory. If using the battery plate, connect a compatible battery (AB Gold mount or V-Lock) to the plate, and connect the short cable from the plate to the receiver's DC input (I).
- 3 Attach the two TX antennas to the transmitter and the five smaller RX antennas to the receiver via the threaded RP-SMA connectors (A).
- 4 Move the power switches on both the transmitter and receiver (H) to the ON position. Video appears within a few seconds.



HDMI SDI  
AC adapter  
P-Tap to Lemo

- |                     |                   |                    |                           |
|---------------------|-------------------|--------------------|---------------------------|
| A: RP-SMA Connector | F: Mini USB Port  | K: 3G-SDI Input    | P: HDMI Output            |
| B: Video Status     | G: HDMI Input     | L: SDI Status      | Q: Status Joystick        |
| C: Link Status      | H: Power Switch   | M: HDMI Status     | R: Menu Joystick          |
| D: Power Status     | I: 7-28V DC Input | N: USB Status      | S: Link Quality Indicator |
| E: Fault LED        | J: 3G-SDI Output  | O: Fault/Error LED | T: USB 3.0 Port           |

### NEED MORE HELP?

1. Support forum: <http://support.teradek.com> → Contains tips, information and all the latest firmware & software updates.
  2. Training videos: <http://www.teradek.com/training>
- TERADEK SUPPORT STAFF: [support@teradek.com](mailto:support@teradek.com) or call 888-941-2111 ext2 (Mon-Fri 7am to 6pm PST)

# BEST PRACTICES

## BOLT LEMO CONNECTOR / PIN-OUT

Bolt uses a 0B 302 series LEMO connector (FGG.0B.302.CLADxx).

Pin	Description
1*	GND
2	+DC



\* Pin 1 is closest to the red dot on the LEMO connector

## CUSTOM / 3RD PARTY CABLES

- Test the power cable polarity with **ONLY** the power cable connected to Bolt. Do not connect video cables.
- Check the power cable for shorts and proper grounding.

**CAUTION:** Using a reverse polarity or improperly-constructed power cable can damage the product and is not covered under warranty.

## BOLT MANAGER SOFTWARE

Bolt Manager allows you to configure and upgrade your Bolt Pro 600/2000. It is available at [www.teradek.com/pages/downloads](http://www.teradek.com/pages/downloads). The following configuration is available:

- Region Selection - Configure Bolt Pro to comply with your region's regulations governing use of the 5GHz spectrum.
- Frequency Selection (Bolt Pro 600/2000 only) - Use this to select which channels Bolt Pro will use during operation. This must be set on both the transmitter and receiver.
- Transmission Mode (Bolt Pro 2000 only) - Selects between the following modes. Please see Bolt manager for more details :
  - Unicast Mode (Default) - 1:1 communication only, but more frequencies are available for use.
  - Broadcast Mode - Up to 4 receivers per transmitter, reconnection takes less time.

## DEVICE OPERATION

### Bolt Pro 600/2000

- Keep the transmitter and receiver at close range for 60 seconds after powering on the devices. This allows them to scan for and select the best wireless channel.
- For best results when using multiple Bolt systems in the same area, place the transmitters and receivers a few feet apart from each other.
- Operation of other wireless equipment may interfere with the Bolt for best results, separate other wireless transmitters and receivers as much as possible.

### Bolt Pro 2000

- If the receiver loses signal due to interference or it exceeds the maximum range, do not power down either device. If the devices remain powered they will reconnect more quickly.
- While operating in Unicast Mode, if either device loses power, regardless of whether or not the link was established, both must be power cycled before the link can be restored.

## MOUNTING

- Mount the Bolt Pro 600/2000 transmitter vertically, keeping the antennas clear of any obstructions.
- Orient the transmitter and receiver antennas so they are parallel to each other.
- For best results, orient the receiver antennas so each one has clear line-of-sight to the receiver.



Bolt receiver can be mounted vertically on a light stand or monitor

Bolt transmitter mounted vertically on a camera